

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
25 August 2005 (25.08.2005)

PCT

(10) International Publication Number  
**WO 2005/077441 A3**

(51) International Patent Classification<sup>7</sup>: **A61M 5/20**, 5/24

(21) International Application Number:  
PCT/EP2005/050711

(22) International Filing Date: 17 February 2005 (17.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
04100647.9 18 February 2004 (18.02.2004) EP

(71) Applicant (for all designated States except US): **ARES TRADING S.A.** [CH/CH]; Zone Industrielle De l'Ourietaz, CH-1170 Aubonne (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PONG-PAIROCHANA, Vincent** [CH/CH]; Route de Belmont

47, CH-1093 La Conversion (CH). **MACLEAN, Timothy, John** [GB/GB]; Flat 3, 1 Edward Street, Bathwick, Bath and South East Somerset BA2 4DU (GB).

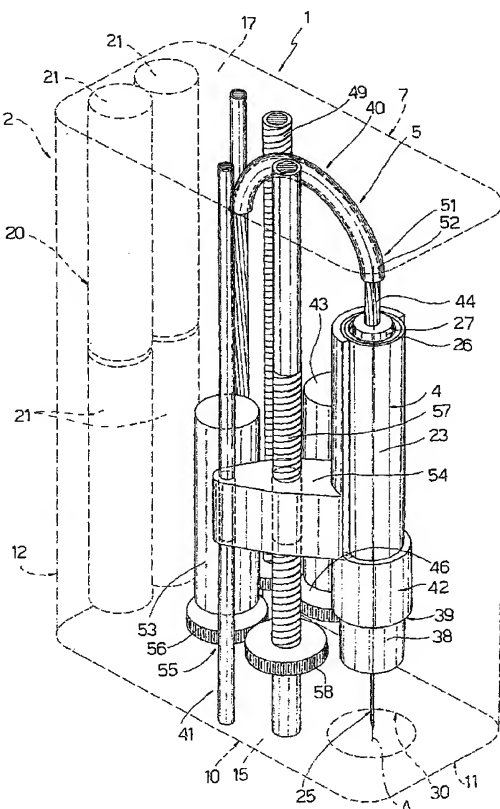
(74) Agents: **JORIO, Paolo** et al.; Studio Torta S.r.l., Via Viotti, 9, I-10121 Torino (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: HAND-HELD ELECTRONICALLY CONTROLLED INJECTION DEVICE FOR INJECTING LIQUID MEDICATIONS



(57) Abstract: There is described a hand-held, electronically controlled injection device (1) for injecting preset doses of liquid medications, having a housing (2) for receiving a cartridge (4) containing the liquid medication and having a contact surface (16) for contacting a patient's skin; and actuator means (41) for moving the cartridge (4) within the housing (2) to and from the contact surface (16).



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

**(88) Date of publication of the international search report:**  
1 December 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*